```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
L1
     76824-35-6 REGISTRY
RN
     Propanimidamide, 3-[[[2-[(aminoiminomethyl)amino]-4-thiazolyl]methyl]thio]-
CN
     N-(aminosulfonyl) - (9CI) (CA INDEX NAME)
OTHER NAMES:
     3-[(2-Diaminomethyleneaminothiazol-4-yl)methylthio]-N-
     sulfamoylpropionamidine
CN
     Amfamox
CN
     Dispromil
CN
     Famodil
CN
     Famodine
     Famosan
CN
     Famotidine
CN
CN
     Famoxal
CN
     Fanosin
CN
     Fibonel
CN
     Ganor
CN
     Gaster
CN
     Gastridin
CN
     Gastropen
CN
     Ifada
CN
     Lecedil
CN
     MK 208
CN
     Motiax
CN
     Muclox
CN
     N-(Aminosulfonyl)-3-[[[2-[(diaminomethylene)amino]-4-
     thiazolyl]methyl]thio]propanimidamide
CN
     Nulcerin
CN
     Pepcid
CN
     Pepcid AC
CN
     Pepcid PM
CN
     Pepcidina
CN
     Pepcidine
CN
     Pepdine
CN
     Pepdul
CN
     Peptan
CN
     Ulcetrax
CN
     Ulfamid
CN
     Ulfinol
CN
     YM 11170
FS
     3D CONCORD
MF
     C8 H15 N7 O2 S3
CI
     COM
                   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, DDFU, DIOGENES, DRUGPAT, DRUGU, EMBASE, HSDB*, IFICDB,
       IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH,
       PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL,
       VETU
         (*File contains numerically searchable property data)
     Other Sources: DSL**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
    NH
                  \sim CH<sub>2</sub>-S-CH<sub>2</sub>-CH<sub>2</sub>-C-NH-S-NH<sub>2</sub>
```

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1129 REFERENCES IN FILE CA (1957 TO DATE)
- 37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1132 REFERENC

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
L3
RN
     73590-58-6 REGISTRY
CN
     1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-
     pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
     (.+-.)-Omeprazole
CN
     2-[[(3,5-Dimethyl-4-methoxy-2-pyridyl)methyl]sulfinyl]-5-methoxy-1H-
CN
     benzimidazole
CN
     Acidex
CN
     Antra
     Antra MUPS
CN
     Audazol
CN
     Aulcer
CN
     Belmazol
CN
CN
     Ceprandal
CN
     Desec
     Dizprazol
CN
     Dudencer
CN
CN
     Elgam
CN
     Emeproton
CN
     Epirazole
CN
     Gastrimut
CN
     Gastroloc
CN
     Gastrozole
CN
     Gibancer
CN
     H 168/68
CN
     Indurgan
CN
     Inhibitron
CN
     Inhipump
CN
     Logastric
CN
     Lomac
CN
     Losec
CN
     Mepral
CN
     Miol
CN
     Miracid
CN
     Mopral
CN
     Ocid
CN
     Omapren
CN
     Omebeta 20
CN
     Omed
CN
     Omedar
CN
     OMEP
CN
     Omepradex
CN
     Omepral
CN
     Omeprazen
CN
     Omeprazole
CN
     Omeprazon
CN
     Omepril
CN
     Omezol
CN
     Omezzol
CN
     Omid
CN
     Omisec
CN
     Omizac
CN
     OMP
CN
     Ompanyt
CN
     OMZ
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
FS
     3D CONCORD
     172964-80-6, 131959-78-9
DR
MF
     C17 H19 N3 O3 S
CI
     COM
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
LC
     STN Files:
```

L13 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2003 ACS

The effect of the H2 blockers cimetidine and ranitidine on drug-induced damage to gastric cell monolayers was evaluated in conditions independent of systemic factors and their antiacid properties. Monolayers of mucous cells from a human cell line MKN 28, obtained from human gastric adenocarcinoma, were studied. Cell damage was assessed qual. by trypan blue dye exclusion test and quant. by 51Cr release assay. Cimetidine and ranitidine protected cultured cells against damage induced by Na taurocholate decreasing taurocholate induced 51Cr release by 36 and 28%, resp. Cimetidine was protective in concns. lower than ranitidine. This protection was not prevented by the prostaglandin synthesis inhibitor indomethacin nor by the sulfhydryl (SH) blocker N-ethylmaleimide. Incubation with cimetidine and ranitidine did not increase the prodn. of PGE2 by cultured cells nor did it affect the cellular level of SH compds. Cimetidine and ranitidine did not afford protection against damage induced by indomethacin and ethanol. Cimetidine (10-4M) increased ethanol-induced damage significantly. In conclusion (1) cimetidine and ranitidine protect gastric cells against taurocholate-induced damage in vitro, independently of their antiacid effect; (2) this protection is not mediated by PGE2 or SH compds.; (3) cimetidine and ranitidine do not protect gastric cells against damage induced by indomethacin and ethanol.

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine

RL: BIOL (Biological study)

(drug-induced ulcer inhibition by, mechanism of)

57-41-0, Phenytoin 50-54-4, Quinidine sulfate 53-86-1, Indomethacin 58-55-9, Theophylline, biological studies 69-09-0, Chlorpromazine hydrochloride 94-20-2, Chlorpropamide 144-55-8, Sodium hydrogen carbonate, biological studies 471-34-1, Calcium carbonate, biological studies 546-93-0, Magnesium carbonate 549-18-8, Amitriptyline hydrochloride 614-39-1, Procainamide hydrochloride 1309-48-4, Magnesium oxide, biological studies 2610-86-8, Warfarin potassium 3166-62-9, Methylbenactyzium bromide 12304-65-3, Hydrotalcite 12511-31-8, Magnesium aluminate metasilicate 15676-16-1, Sulpiride 15687-27-1, Ibuprofen 20830-75-5, Digoxin 21645-51-2, Aluminum hydroxide, biological studies 22071-15-4, Ketoprofen 22204-53-1, Naproxen 28041-93-2, Aluminum calcium p-aminosalicylate 51481-61-9, 54182-58-0, Sucralfate 65277-42-1, Ketoconazole Cimetidine 66357-35-5, Ranitidine 70458-96-7, Norfloxacin 76824-35-6, Famotidine 76963-41-2, Nizatidine 78273-80-0, Roxatidine 81789-85-7, Indenolol hydrochloride 93107-08-5, Ciprofloxacin hydrochloride RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals contg. antacid agents for preventing

L12 ANSWER 15 OF 149 CAPLUS COPYRIGHT 2002 ACS Sulfonate-containing strong acidic ion-exchange resins as TT inhibitors of Helicobacter pylori adhesion Sulfonate-contg. strong acidic ion-exchange resins, e.g. sulfonated AB polystyrene-divinylbenzene copolymer, are claimed as inhibitors of Helicobacter pylori adhesion and are useful for treatment of gastritis, gastric ulcer, and duodenal ulcer in combination with gastric acid secretion inhibitors. ΙT Stomach (acid secretion inhibitors; sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) Intestine, disease ΙT (duodenum, ulcer; sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) IT Stomach, disease (gastritis; sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) ITAdhesion, biological Antiulcer agents Drug interactions Helicobacter pylori (sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) IT Ion exchangers (sulfonated; sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) ΙT Stomach, disease (ulcer; sulfonate-contg. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) 9042-14-2, Dextran sulfate 9064-57-7, .lambda.-Carrageenan IT .kappa.-Carrageenan 104469-08-1, Fractogel PGM 2000 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (sulfonate-contq. strong acidic ion-exchange resins as inhibitors of Helicobacter pylori adhesion) APPLICATION NO. DATE PATENT NO. KIND DATE ----------JP 2001031576 A2 20010206 ΡI JP 2000-145066 20000517

L12 ANSWER 16 OF 149 CAPLUS COPYRIGHT 2002 ACS A high molecular mass constituent of cranberry juice inhibits Helicobacter pylori adhesion to human gastric mucus Because previous studies have shown that a high mol. mass constituent of AB cranberry juice inhibited adhesion of Escherichia coli to epithelial cells and coaggregation of oral bacteria, we have examd. its effect on the adhesion of Helicobacter pylori to immobilized human mucus and to erythrocytes. We employed three strains of H. pylori all of which bound to the mucus and agglutinated human erythrocytes via a sialic acid-specific adhesin. The results showed that a high mol. mass constituent derived from cranberry juice inhibits the sialic acid-specific adhesion of H. pylori to human gastric mucus and to human erythrocytes. IT Sialic acids RL: BSU (Biological study, unclassified); BIOL (Biological study) (-specific adhesion; cranberry juice high mol. mass constituent inhibits Helicobacter pylori adhesion to human gastric mucus and erythrocytes) IT Cell adhesion Erythrocyte Helicobacter pylori Mucus Stomach (cranberry juice high mol. mass constituent inhibits Helicobacter pylori adhesion to human qastric mucus and erythrocytes) IT Fruit and vegetable juices (cranberry; cranberry juice high mol. mass constituent inhibits Helicobacter pylori adhesion to human gastric mucus and erythrocytes) Cranberry IT (juice; cranberry juice high mol. mass constituent inhibits Helicobacter pylori adhesion to human gastric mucus and erythrocytes) IT Adhesins RL: BSU (Biological study, unclassified); BIOL (Biological study) (sialic acid-specific; cranberry juice high mol. mass constituent inhibits Helicobacter pylori adhesion to human gastric mucus and erythrocytes)

L12 ANSWER 17 OF 149 CAPLUS COPYRIGHT 2002 ACS

Helicobacter pylori is a major etiol. agent in gastroduodenal disorders. The adhesion of H. pylori to gastric epithelial cells is the initial step of H. pylori infection. Inhibition of H. pylori adhesion is thus a therapeutic target in the prevention of H. pylori infection. We have reported that rebamipide and ecabet sodium, mucoprotective antiulcer agents, independently inhibit H. pylori adhesion. However, the antiadhesion activity of each antiulcer agent was incomplete. Expts. were performed to evaluate the combined effect of rebamipide and ecabet sodium on H. pylori adhesion to gastric epithelial cells. MKN-28 and MKN-45 cells, derived from human gastric carcinomas, were used as target cells. Twelve clin. isolates of H. pylori were used in this study. We evaluated the effects of rebamipide and ecabet sodium, individually and in combination, on H. pylori adhesion to target cells quant. using our previously established ELISA. Rebamipide and ecabet sodium each partially inhibited H. pylori adhesion. In contrast, adhesion was almost completely inhibited by pretreating target cells and H. pylori with the combination of rebamipide and ecabet sodium. Our studies suggest that the synergistic antiadhesion activity of rebamipide and ecabet sodium is greater than that of each antiulcer agent alone.

L12 ANSWER 18 OF 149 CAPLUS COPYRIGHT 2002 ACS

TI Inhibiting of growth and adhesion of

Helicobacter pylori using egg yolk antibodies

AB Helicobacter pylori is known as a key pathogen for chronic gastric and duodenal ulcers. Egg yolk antibody, IgY produced from chicken immunized with H. pylori antigen was tested for the inhibition of growth and adhesion of H. pylori to gastric epithelial cell, AGS. The colony forming of H. pylori was repressed by 30% using 1 mg/mL of IgY while that of E. coli was only 7% with the same amt. of IgY, which showed the growth inhibition of H. pylori was mainly due to the specific interaction between IgY and H. pylori. The inhibition of H. pylori adhesion to AGS was a high as 90% using 0.5 mg/mL of antibody More than 80% of H. pylori attached to AGS could be detached treating with the same amt. of IqY for one and a half hr. However, this effect was severely dependent on the H. pylori strains tested. The strain used for immunization of chicken was very sensitive to the antibody treatment but changing the test strain generally showed a variation in adhesion inhibition between 15 and 80%. Further studies are necessary to employ the egg yolk antibodies for the treatment of H. pylori in vivo. IT Proteins, specific or class

RL: BSU (Biological study, unclassified); BIOL (Biological study) (OMP (outer membrane protein); growth and adhesion to gastric epithelium by Helicobacter pylori is inhibited by IqY to)

IT Immunoglobulins

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(Y; growth and adhesion to gastric epithelium by

Helicobacter pylori is inhibited by)

IT Stomach

. . . .

(epithelium; growth and adhesion to gastric epithelium by Helicobacter pylori is inhibited by IgY)

BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB\*, IPA, MEDLINE, MRCK\*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data) Other Sources:  $$\operatorname{WHO}$$ 

$$\begin{array}{c|c}
N & O & Me \\
N & S - CH_2 & Me
\end{array}$$
Me OMe 
$$\begin{array}{c|c}
Me & OMe \\
Me & Me
\end{array}$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2353 REFERENCES IN FILE CA (1957 TO DATE)
45 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2362 REFERENCES IN FILE CAPLUS (1957 TO DATE)